## IN THE CLAIMS

(Currently Amended) A method for determining an optimal bid for an item in a market, said 1. method comprising:

- a) selecting characteristics of said market;
- b) selecting a bidding model;
- c) estimating a structure of said market, wherein unobservable variables are expressed in terms of observable bids by inverting said bidding model;
  - d) determining a bid function; and
  - e) determining said optimal bid.
- 2. (Original) The method as recited in Claim 1, wherein said step a) comprises: receiving a first user input, wherein said first user input comprises information identifying an item

to be bid on;

accessing a database;

retrieving historical bids data from said database;

retrieving auction characteristics data from said database, wherein said auction characteristics data comprise information relating to historical auctions of items similar to said item to be bid on:

outputting said historical bids data; and

outputting said auction characteristics data.

3. (Original) The method as recited in Claim 1, wherein said step b) comprises:

receiving auction characteristics data;

accessing a database;

retrieving from said database said bidding model; wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and

outputting said bidding model.

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(Currently Amended) The method as recited in Claim 1, wherein said step c) comprises;
 receiving said bidding model;

receiving historical bids data;

expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bidding model;

transforming said historical bids data to a sample of inverted bids, wherein said historical bids data are transformed by inverting said bidding model;

estimating a structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said structure; and outputting said structure.

5. (Original) The method as recited in Claim 1, wherein said step d) comprises:

receiving a second user input;

receiving a structure;

generating a bid function, wherein said bid function is based on said structure and said second user input; and

outputting said bid function.

6. (Original) The method as recited in Claim 5, wherein said second user input comprises:

an auction format;

a valuation of said item; and

an expected number of rival bidders.

7. (Original) The method as recited in Claim 1, wherein said step e) comprises:

receiving a third user input, wherein said third user input comprises an evaluation criteria;

receiving said bid function;

calculating said optimal bid based on said third user input and said bid function; and

outputting said optimal bid.

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Examiner: Shrestha, B Art Unit: 3691 8. (Currently Amended) A computer system comprising:

a bus;

a memory interconnected with said bus; and

a processor interconnected with said bus, wherein said processor executes a method for determining an optimal bid for an item n a market, said method comprising:

- a) selecting characteristics of said market;
- b) selecting a bidding model;
- c) estimating a structure of said market, <u>wherein unobservable variables are expressed in terms</u>
  of observable bids by inverting said bidding model;
  - d) determining a bid function; and
  - e) determining said optimal bid.
- 9. (Original) The computer system as recited in Claim 8, wherein said step a) comprises: receiving a first user input, wherein said first user input comprises information identifying an item to be bid on:

accessing a database;

retrieving historical bids data from said database;

retrieving auction characteristics data from said database, wherein said auction characteristics data comprise information relating to historical auctions of items similar to said item to be bid on;

outputting said historical bids data; and

outputting said auction characteristics data.

10. (Original) The computer system as recited in Claim 8, wherein said step b) comprises:

receiving auction characteristics data;

accessing a database;

retrieving from said database said bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and

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outputting said bidding model.

11. (Currently Amended) The computer system as recited in Claim 8, wherein said step c) comprises:

receiving said bidding model;

receiving historical bids data;

expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bidding model;

transforming said historical bids data to a sample of inverted bids, wherein said historical bids data are transformed by inverting said bidding model;

estimating a structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said structure; and outputting said structure.

12. (Original) The computer system as recited in Claim 8, wherein said step d) comprises:

receiving a structure;

receiving a second user input;

generating a bid function, wherein said bid function is based on said structure and said second user input; and

outputting said bid function.

13. (Original) The method as recited in Claim 12, wherein said second user input comprises:

an auction format;

a valuation of said item; and

an expected number of rival bidders.

14. (Original) The computer system as recited in Claim 8, wherein said step e) comprises:

receiving a third user input, wherein said third use input comprises an evaluation criteria:

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receiving said bid function;

calculating said optimal bid based on said third user input and said bud function; and outputting said optimal bid.

15. (Currently Amended) A computer readable medium for causing a computer system to execute

the steps n a method for determining an optimal bid for an item in a market, said method comprising:

a) selecting characteristics of said market;

b) selecting a bidding model;

c) estimating a structure of said market, wherein unobservable variables are expressed in terms

of observable bids by inverting said bidding model;

d) determining a bid function; and

e) determining said optimal bid.

16. (Original) The computer readable medium as recited in Claim 15, wherein said step a)

comprises:

receiving a first user input, wherein said first user input comprises information identifying an item

to be bid on;

accessing a database;

retrieving historical bids data from said database;

retrieving auction characteristics data from said database, wherein said auction characteristics

data comprise information relating to historical auctions of items similar to said item to be bid on;

outputting said historical bids data; and

outputting said auction characteristics data.

17. (Original) The computer readable medium as recited in Claim 15, wherein said step b)

comprises:

receiving auction characteristics data;

accessing a database;

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retrieving from said database said bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and

outputting said bidding model.

18. (Currently Amended) The computer readable medium as recited in Claim 15, wherein said step c) comprises:

receiving said bidding model;

receiving historical bids data;

expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bidding model;

transforming said historical bids data to a sample of inverted bids, wherein said historical bids data are transformed by inverting said bidding model;

estimating a structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said structure; and

outputting said structure.

19. (Original) The computer readable medium as recited in Claim 15, wherein said step d) comprises:

receiving a second user input;

receiving a structure;

generating a bid function, wherein said bid function is based on said structure and said second user input; and

outputting said bid function.

20. (Currently Amended) The <u>computer readable medium</u> method as recited in Claim 19, wherein said second user input comprises:

an auction format;

a valuation of said item; and

Serial No.: 09/955,264 7 Examiner: Shrestha, B Art Unit: 3691 an expected number of rival bidders.

21. (Original) The computer readable medium as recited in Claim 15, wherein said step e) comprises:

receiving a third user input, wherein said third user input comprises an evaluation criteria; receiving said bid function;

calculating said optimal bid based on said third user input and said bid function; and outputting said optimal bid.